



Materials Engineering Branch

TIP*



No. 129 Availability of Frozen Ready Mixed Resins

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For well over 25 years, the Materials Engineering Branch has been supplying many GSFC projects with various flight quality resins as requested. This was a rather labor-intensive activity and required a considerable amount of time and coordination if we were asked to mix a polymeric material for the user. Once mixed, the working time available (pot life) became a critical driver. For the majority of resins that we use, the pot life is thirty to sixty minutes.

Since 1990, frozen premixed resins have been available for our most commonly used materials. This eliminates the labor-intensive steps and makes the materials more readily available when needed. This approach also eliminates some of the waste associated with the previous system and makes readily available all the pertinent information about the product, which is clearly printed on the container (a syringe cartridge). This additional service has proven quite successful and convenient in our experience.

Our most reliable source of pre-mixed frozen resins is Appli-tec, Haverhill, MA, 01832. All orders are shipped in dry ice (frozen CO₂) and must be stored in a low temperature freezer at -60°C or below. Alternately, they can be refrigerated in dry ice or LN₂ until use.